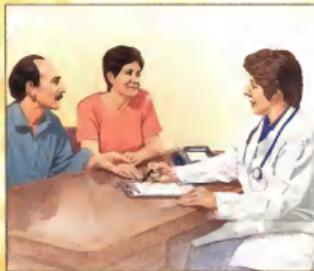


*Understanding*  
**BREAST  
CANCER**

*Surgery  
and  
Adjuvant Therapy*





# Facing Breast Cancer

Having breast cancer means that some cells in your breast are growing abnormally. If you have been diagnosed with breast cancer, you may feel angry or scared. Many people facing cancer feel this way. But learning about the disease can give you strength. It can also help you feel in control. Read on to learn about breast cancer, what to expect, and the choices you have in treatment.

## Your Diagnosis

Many kinds of tests are used to help diagnose breast cancer. You've already had a biopsy. This procedure removes a tissue sample for study. You may also have had imaging tests such as mammography. These tests show changes in breast tissue. After your diagnosis, you and your doctor will discuss the nature of your disease and your treatment options.

## Taking an Active Role

You can help maintain a sense of control by taking an active role in your treatment:

- Learn as much as you can about breast cancer and its treatment options.
- Ask any questions that you have. Don't be afraid to get a second opinion.
- Talk to other women who have been treated for breast cancer.
- Stay as active as you can, doing things that you enjoy.



This booklet is not intended as a substitute for professional medical care.  
Only your doctor can diagnose and treat a medical problem.

©2001, 2004 The StayWell Company, 1100 Grundy Lane, San Bruno, CA 94066-3030.  
[www.krames.com](http://www.krames.com) 800-333-3032. All rights reserved. Lithographed in Canada.

## Finding Support

The decisions you make about your body are personal ones. But you don't have to make them alone. Share your feelings with friends, family members, and spiritual advisors. Help them support you by telling them what you need.



## Working with Your Healthcare Team

Talk to your primary care provider about setting up a healthcare team. Your team may include:

- A **surgical oncologist**, a doctor who performs operations to diagnose and remove cancer.
- A **medical oncologist**, a doctor who specializes in using medication to treat people with cancer.
- A **radiation oncologist**, a doctor who specializes in radiation therapy.
- A **plastic and reconstructive surgeon**, a doctor who can reconstruct the breast.
- Other healthcare providers, such as a physical therapist, health psychologist, or nurse specialist.

## Table of Contents

Understanding Your Breasts .....	4
Breast Biopsy .....	5
Changes in Your Breast .....	6
How Results Affect Treatment .....	7
Coping with Your Diagnosis .....	8
Lumpectomy .....	10
Mastectomy .....	12
Recovering After Mastectomy .....	14
Healing at Home After Surgery .....	15
If You Choose Breast Reconstruction .....	16
Radiation Therapy .....	18
Chemotherapy .....	19
Managing Side Effects of Chemotherapy .....	20
Hormone Therapy .....	22
Follow-up Care .....	23

Recommendations in this booklet follow the American Cancer Society's guidelines.

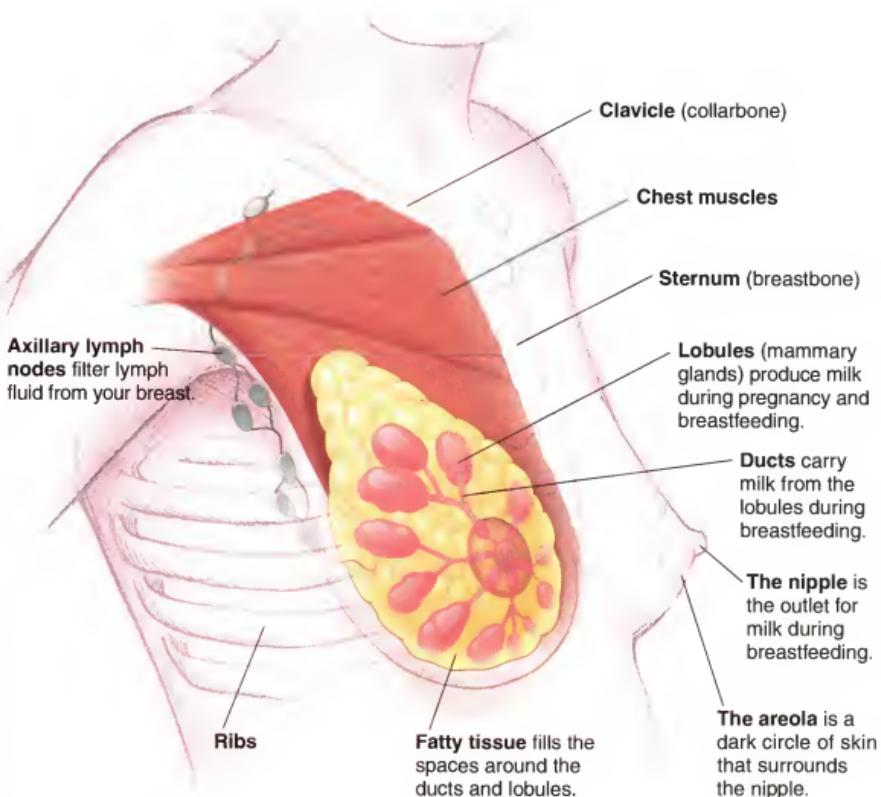


# Understanding Your Breasts

Breasts come in all shapes and sizes. But they all share the same features. By learning about the parts of your breast, you can better understand how they are related to cancer. Ask your doctor about the stage of your cancer. The stage describes the size of your tumor. It also tells you whether or not the cancer has spread.

## The Parts of Your Breast

You may know the nipple and areola, the parts of your breast that you can see. But the parts that you can't see include lobules, ducts, and fatty tissue. Together, all of these parts form a healthy breast.



# Breast Biopsy

After the lump or breast change was found, you were sent for a **biopsy**. This procedure removes a tissue sample. Studies of the tissue removed during biopsy can detect the presence of cancer.

## Types of Breast Biopsy

The choice of which biopsy to use depends on whether you felt a breast lump, or whether an imaging test showed a change in your breast.



### Needle Biopsy

When a lump can be felt, a needle biopsy may be done. **Fine needle aspiration** uses a needle to draw cells or fluid from the lump. **Core needle biopsy** takes a sample of tissue.



### Image-Guided Biopsy

When a breast change cannot be felt, an image-guided biopsy can be used to find it. X-rays (**stereotactic mammography**) or sound waves (**ultrasound**) are used to pinpoint the breast change. A tissue sample is then removed, using either a core needle or a **vacuum-assisted probe**.



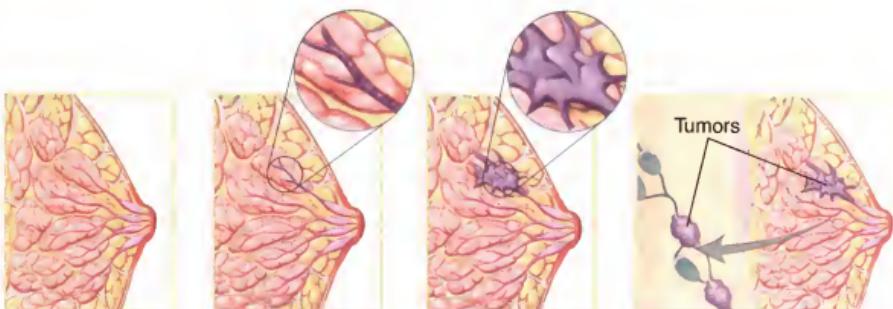
### Surgical Biopsy

Part or all of a breast change may be surgically removed. If the breast change cannot be felt, image guidance can be used to locate it. One or more thin wires may be inserted into the breast near the lump (**wire localization**). An incision is then made and the lump or mass is removed. The wires are taken out during the biopsy.



# Changes in Your Breast

Your entire body is made of living tissue. This tissue is made up of tiny cells. You can't see these cells with the naked eye. Normal cells reproduce (divide) in a controlled way. When you have cancer, some cells become abnormal, changing shape. These cells may divide quickly and spread into other parts of the body.



**Normal** breast tissue is made of healthy cells. They reproduce new cells that look the same.

**Noninvasive** breast cancer (**carcinoma in situ**) occurs when cancer cells are only in the ducts.

**Invasive** breast cancer occurs when abnormal cells move out of the ducts or lobules into the surrounding breast tissue.

**Metastasis** occurs when cancer cells move into the lymph nodes or bloodstream and travel to another part of the body.

## Stages of Breast Cancer

Several tests are used to measure the size of a tumor and learn how far it has spread. This is called **staging**. The stage of your cancer will help determine your treatment. Based on American Cancer Society guidelines, the stages of breast cancer are:

- **Stage 0.** The cancer is noninvasive. Cancer cells are all contained within the ducts (**ductal carcinoma in situ**).
- **Stage I.** The tumor is 2 cm or less in diameter. It has invaded the surrounding breast tissue, but has not spread to the underarm lymph nodes.
- **Stage II.** The tumor is larger than 2 cm or has spread to the lymph nodes under the arm.
- **Stage III.** The tumor is larger than 5 cm and/or the tumor has spread to the skin, chest wall, or nearby lymph nodes.
- **Stage IV.** The tumor has spread to the bones, lungs, or lymph nodes far away from the breast.
- **Recurrent breast cancer.** When cancer returns despite treatment. Local recurrence is confined to the breast itself. With distant recurrence, the cancer can appear beyond the breast.



## How Results Affect Treatment

Your doctor will explain your biopsy results (**pathology report**). The stage of the cancer as well as its aggressiveness will determine the treatment you need. Several surgical procedures are used to treat breast cancer. You and your surgeon will decide which approach is best for you.

### Learning More About Your Cancer

After the biopsy, your doctor may order tests to learn more about your cancer. The results of these tests may help determine if adjuvant therapy should be used along with surgery.

- Tests may be done on the biopsy sample to determine how fast the cancer is growing, and to see if the cancer has hormone receptors that respond to estrogen or progesterone.
- Blood tests, a chest x-ray, and a bone scan may be done to see whether cancer cells have spread to other parts of the body.

### Planning Surgery

After discussing your test results, your doctor may recommend surgery. You may discuss having the surgery before or after other types of treatment. You may also talk about breast reconstruction. If you have surgery, your doctor will order studies of the removed tissue. The results of these tests will help guide further treatment.

### Planning Adjuvant Therapy

Your plan may call for one or more types of **adjuvant therapy**. These are treatments used in addition to surgery. Adjuvant therapy kills cancer cells, and helps keep breast cancer from returning. You may have the following before or after surgery:

- Chemotherapy
- Radiation therapy
- Hormone therapy





# Coping with Your Diagnosis

Facing breast cancer will challenge the way you see yourself and your life. You may feel strong one day and scared the next. This is normal. Coping with cancer is an ongoing process. To feel more in control, learn about breast cancer and its treatment. And don't be afraid to ask for help whenever you need it.

## Learning the Facts

Because breast cancer treatment keeps changing and improving, you may get confused about your options. Don't let that stop you from learning. Keep a list of your questions in a notebook. Then ask your healthcare team for answers during a phone call or office visit. The more you know, the better equipped you will be to help plan your treatment.

## Taking Care of Yourself

You have a lot to think about right now. Go easy on yourself. Put your own needs first. You may want privacy or the support of others. Here are some tips to help:

- Take time for yourself if you need it. You may have a lot of feelings. It's okay if you're not ready to share them yet.
- Talk to family, friends, and spiritual advisors if you are ready. You can gain strength through their support.
- Join a support group. It may be easier to talk to women who have had some of the same fears and concerns as you. You can also ask for personal advice about doctors, treatments, and ways to cope with cancer.



## Finding Your Self-Image

It's normal to worry about how your body will change after cancer. But remember, your loved ones care for you because of who you are, not because of your body. Finding your self-image will help you gain strength and confidence. To get a better sense of how you define yourself, think about these questions:

- Which parts of your daily life are most important to you?
- What things make you feel feminine?
- Which parts of your personality make you feel sexy or strong?
- What do you like best about yourself?



## Deciding on Breast Reconstruction

If you're going to have a mastectomy, breast reconstruction is an option. Your decision may depend on how you feel about your appearance. It may also depend on how you feel about having more surgery. Breast reconstruction may:

- Improve your body image.
- Restore your body posture and balance.
- Increase your comfort in clothing.
- Be done either at the same time as the mastectomy or later on. However, your recovery time may depend on when you have the surgery.





# Lumpectomy

**Lumpectomy** is surgery to remove cancer. It is a breast-conserving surgery. This means your breast remains intact. If you are having a lumpectomy, you will likely have radiation therapy as well (see page 18). After the surgery, you will be given home care instructions.

## Before Surgery

A week or more before the procedure, you will have an exam and routine tests. Remember to:

- Sign any consent forms.
- Tell your healthcare provider about any medications, herbs, or supplements that you are taking.
- Avoid eating or drinking for 8 to 12 hours before surgery, or as directed.
- Arrange for a trusted adult to drive you home after surgery.
- Bring a soft shirt that buttons in front to wear on the way home.
- Talk to the anesthesia care provider. He or she will explain how you will be kept free of pain during surgery.

## Risks and Complications

Lumpectomy and lymph node surgery involve certain risks. These include:

- Infection
- Bleeding
- Fluid collection (seroma)
- Pain or numbness
- Long-term swelling of the arm (lymphedema)



You may have two incisions. One will be near the tumor site. The other may be under the arm, near the lymph nodes.

## During Surgery

Your surgeon will make an incision to remove the tumor. A surrounding margin of normal tissue will also be taken.

## Sentinel Node Biopsy

Cancer cells can travel beyond the breast to the lymph nodes. During surgery, the first lymph node or nodes that cancer cells could reach may be removed and screened (**sentinel node biopsy**). If appropriate, more of the nodes are removed. If any nodes contain cancer, adjuvant therapy is often needed.

## Right After Surgery

You will wake up in the recovery room. You may have an IV (intravenous) line for fluids and medications. Pain medications will be given to you as needed. A nurse will check your temperature, pulse, and blood pressure. You should be up and walking soon after surgery. You'll likely go home the same day.



## At Home

Before leaving the hospital, you will receive instructions on home care. You may have:

- A dressing over your incision. You may be told to change the dressing in a day or two. Be sure to ask about bathing.
- Stitches at the incision site. They may dissolve on their own. Or they may be removed at your follow-up visit.
- Pain medications to help relieve discomfort. They should be taken as directed.

## When to Call Your Doctor

Call your doctor right away if you have any of the following:

- Fever of 101°F (38.3°C) or higher
- Increased pain, warmth, drainage, swelling, or redness at the incision or drain site
- Cough or shortness of breath
- Pain in the chest or calf
- Bleeding that soaks through the dressing

## If You Have a Drain

If axillary lymph nodes were removed during surgery, you may have a soft plastic drain. This draws off fluid from around the incision. Be sure to empty the drain at least every 8 hours, or as directed. The drain will be removed in your doctor's office.



Remove the plug and measure the fluid as directed.



Once the drain is empty, squeeze the bulb with one hand while using the other hand to replace the plug.



# Mastectomy

Mastectomy is surgery to remove the breast. You may have a simple mastectomy or a modified radical mastectomy. The type of surgery you have depends on the size of your tumor and how far it has spread. If you are nervous about surgery, ask someone you trust to go with you. The hospital staff is also there to help keep you comfortable.

## Before Surgery

A week or more before the procedure, you will have a routine exam. You may also have tests such as a blood test and chest x-ray. Remember to:

- Sign any consent forms.
- Tell your healthcare provider about any medications, herbs, or supplements that you are taking.
- Avoid eating or drinking for 8 to 12 hours before surgery, or as directed.
- Bring a loose blouse that buttons in the front to wear on the way home.
- Arrange for a trusted adult to drive you home after surgery.

## Arriving for Surgery

You may feel nervous on the day of surgery. Knowing what to expect may help you feel more at ease. On the day of surgery:

- An IV will be started to provide you with medications and fluids.
- The anesthesia care provider will talk with you about how you will be kept free of pain during surgery. You will likely have general anesthesia that will let you sleep during surgery.

## Risks and Complications

Mastectomy and lymph node surgery involve certain risks. These include:

- Infection
- Bleeding
- Fluid collection (seroma)
- Pain or numbness
- Stiffness of the shoulder
- Long-term swelling of the arm (lymphedema)

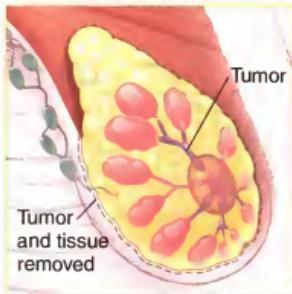




An incision is made in the skin around the nipple.

## Two Types of Mastectomy

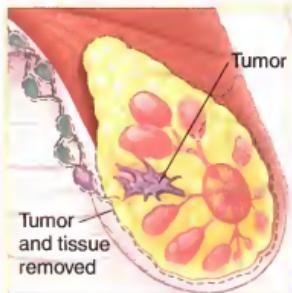
The most commonly done mastectomies are called **simple** and **modified radical**. During these procedures, the chest muscle is not removed. As a result, arm strength remains. Keeping the chest muscle also makes reconstruction easier.



Simple mastectomy removes only breast tissue, skin, and the nipple.

### Simple Mastectomy

During a simple mastectomy, the breast tissue (lobules, ducts, and fatty tissue) and a strip of skin with the nipple are removed. This surgery often requires a hospital stay. Based on the results of surgery and any follow-up tests, further treatment may be needed.



Modified radical mastectomy removes breast tissue, skin, the nipple, and some lymph nodes.

### Modified Radical Mastectomy

This type of mastectomy is usually done to treat invasive cancer. With a modified radical mastectomy, the breast tissue, a strip of skin with the nipple, and some of the axillary lymph nodes are removed. Modified radical mastectomy almost always requires a hospital stay. Based on the results of surgery and follow-up tests, further treatment may be needed.

### Checking the Lymph Nodes

Cancer cells can travel in the lymph fluid. During surgery, the first lymph node or nodes that cancer cells could reach may be removed and screened (**sentinel node biopsy**). Sometimes all of the nodes are removed. If the nodes contain cancer, adjuvant therapy is often needed.



# Recovering After Mastectomy

The length of your hospital stay depends on the type of surgery you have. You'll be given instructions to follow during recovery. Some women feel fine within a month. Others need a few more weeks. Take as much time as you need to adjust to the changes in your life and body.



## Right After Surgery

You will wake up in the recovery room, where you will be closely watched. You may have an IV for medications and fluids. Once fully awake, you will be taken to your room, where you can have visitors. Expect to be up and walking soon after surgery.

### Your First Look

A few days after surgery, your dressing will be removed. Looking at your scar for the first time can be hard. You may feel most at ease taking this step at home. You may want to be alone, or you may want a friend to support you. Either way is okay. At first, try looking down rather than in the mirror.



## At Home

You are likely to go home a few days after surgery. Before leaving, you will receive instructions on home care. You may have:

- One or two soft plastic drains. Be sure to empty your drain at least every 8 hours. Remove the plug and empty the contents into the container provided. Measure the amount of fluid as directed. Write it down to show your doctor. The drainage will decrease as you heal. The drains will be removed at the doctor's office. (For visual information about drains, see page 11.)
- A dressing over your incision. Care for the dressing as directed. Ask how soon you can take a shower.
- Stitches at the incision site. They may dissolve on their own. Or they may be removed at your follow-up visit.
- Pain medications to help relieve any discomfort. Medications should be taken as directed.



# Healing at Home After Surgery

No matter what type of breast surgery you have, your body needs time to recover. After surgery, you will receive information about helping your body heal. You may also be given a temporary prosthesis to wear during this time. And you'll learn what complications to watch for.

## Wearing a Prosthesis

After surgery, you may be given a temporary prosthesis. It's a soft breast form that fits into a bra. Some women wear breast forms to help balance weight and avoid back strain. Other women wear them for appearance. Talk to your doctor if you want a prescription for a permanent prosthesis. You may wear it when your incision feels less tender and swollen.



## Seroma

A **seroma** is a collection of fluid that occurs under the arm or the incision. It can appear 5 to 10 days after surgery. A small seroma is normal. It's likely to go away by itself in a few weeks. If you have a large seroma, your surgeon may drain (**aspirate**) it using a syringe and needle.

## When to Call Your Doctor

Call your doctor right away if you have any of the following:

- Fever of 101°F (38.3°C) or higher
- Cough, pain in the chest or calf, or shortness of breath
- Increased pain, warmth, swelling, or redness near the surgical site
- Bleeding that soaks the bandage
- Seepage from the wound

## Lymphedema

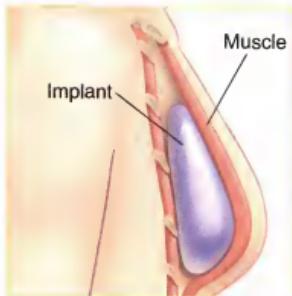
Swelling of the arm on the side of surgery is called **lymphedema**. It occurs when the normal flow of lymph in the arm is reduced. This can happen if lymph nodes under the arm are removed or if the underarm is treated with radiation therapy. Lymphedema can occur long after surgery. To limit problems:

- Slowly return to normal use of the arm on the side of the surgery.
- Protect your hand and arm from infection. Wash your hands often. And wear gloves when cleaning or gardening.
- Keep the fluid moving in your operated arm. Don't wear tight sleeves, elastic cuffs, bracelets, wristwatches, or rings on that arm.
- Do exercises to help prevent swelling and improve circulation. For example, squeeze a rubber ball with your hand.



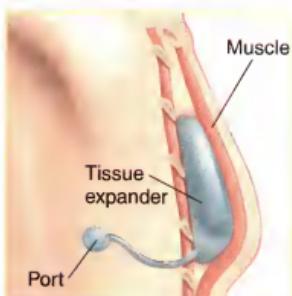
## If You Choose Breast Reconstruction

Reconstruction can be done during or after a mastectomy. There are two main types of breast reconstruction. One is the breast implant. A sac of fluid is inserted during surgery to re-form the shape of the breast. The other type of reconstruction uses your own tissue to rebuild the breast. With both types, a nipple and areola may be created during or after the procedure. If reconstruction is part of your surgery plan, work with your doctor to decide which type is best for you.



### Reconstruction with Implants

Most breast implants are shells filled with fluid. To insert the implant, a small incision is made, often through the mastectomy scar. The implant is placed under your chest muscle. Recovery may take 3 to 6 weeks. You may have surgery later to create a nipple and an areola. Surgery may also be needed to match your remaining breast to the reconstructed one. The reconstructed breast will probably feel firmer than your natural breast.



Fluid is injected into a port under the skin.

### If You Need a Tissue Expander

If you don't have enough muscle and skin to cover an implant, you may need a tissue expander. This is an empty implant shell that inflates as fluid is injected. The expander is placed under the skin and muscle. Fluid is injected through a metal port. This happens about once a week. When the muscle and skin are stretched enough, the expander is replaced with an implant.

### Risks of Implants

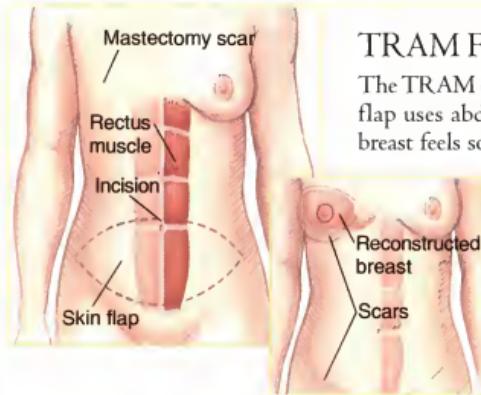
- Infection
- Need for replacement
- Hardened breasts

# Flap Reconstruction

A flap reconstruction uses your own tissue to form the shape of a breast. There are two common procedures for flap reconstruction. You may be instructed to start physical therapy after reconstruction. This is to strengthen the muscles affected by surgery. Recovery may take 6 to 8 weeks.

## Risks of Flap Reconstruction

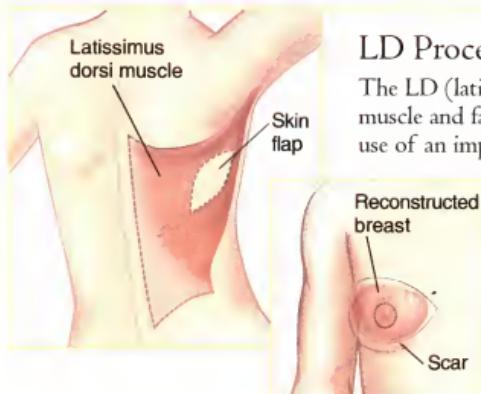
- Infection
- Muscle weakness
- Scar tissue
- Increased complications in smokers



### TRAM Flap

The TRAM (transverse rectus abdominis myocutaneous) flap uses abdominal muscle, fat, and skin. The new breast feels soft to the touch.

A flap of skin and fat is removed from the lower part of the abdomen. One of the abdominal muscles is left attached to the flap. Then the flap is tunneled under the skin from the abdomen to the mastectomy site. There the flap is formed into the shape of a breast.



### LD Procedure

The LD (latissimus dorsi) procedure uses back muscle and fat, and is often combined with the use of an implant.

The latissimus dorsi muscle is detached from the side of the body, over the ribs. The muscle, fat, and skin are moved to the mastectomy site. There they are laid over an implant and secured in place. In many cases, this procedure is done through the mastectomy incision.



# Radiation Therapy

**Radiation therapy** uses high-energy x-rays to kill cancer cells. Most often, it's used to kill stray cancer cells that may remain in the breast after surgery. Radiation therapy also helps prevent breast cancer from returning in any part of your body. If you've had a lumpectomy, you'll probably also have radiation therapy.

## How Radiation Therapy Works

During radiation therapy, waves of energy are focused on the entire breast. These energy waves destroy cancer cells over time. If you had a lumpectomy, a more concentrated dosage of radiation may also be focused at the surgery site. In some cases, lymph nodes are treated as well. These are the only parts of the body that are treated (localized therapy).

## During Treatment

Radiation therapy is an outpatient treatment. It may be given at a hospital or clinic. You'll visit the radiation office each weekday for 5 to 7 weeks. The visit may last up to an hour. But you'll only receive radiation for a few minutes. You will hear the equipment working during treatment, but you won't feel anything.

## Your Body's Response

Radiation therapy is highly effective and its side effects are often mild. A week or more may pass before you have any side effects. Then, your breast and underarm may appear sunburned. Or, they may become swollen and tender. You may feel tired as the treatments progress. These side effects should go away sometime after treatment.





# Chemotherapy

Chemotherapy is medication that attacks cancer cells. It can be given before surgery, after surgery, or on its own. It's also used to help prevent breast cancer from returning anywhere in your body. Depending on the size of your tumor and where it has spread, your oncologist will decide if chemotherapy is right for you.

## How Chemotherapy Works

Chemotherapy is designed to kill cancer cells. This medication is a kind of **systemic therapy**. It travels in the bloodstream throughout your body. Chemotherapy stops the life cycle of cancer cells. Then the cancer cells die.

## During Treatment

Chemotherapy is mostly an outpatient treatment. It may be given at your doctor's office, a clinic, or a hospital. The length of each treatment may differ. It'll depend on whether you take the medication in pill form or through an IV (intravenous) line, or both. Treatment is given in cycles, which may occur every 2 to 5 weeks. Chemotherapy treatments given by IV may last up to 4 hours, depending on the medications used. Between treatments, your body has a chance to recover. The course of treatment often lasts 3 to 6 months. Your medical oncologist will help direct you to the best agents for your type of cancer.

## Your Body's Response

While helping your body fight cancer, chemotherapy can also cause side effects. These may include fatigue, nausea and vomiting, mouth sores, hair loss, and an increased risk of infection. Tell your healthcare provider if you have side effects. Special medications may help control them.





# Managing Side Effects of Chemotherapy

Chemotherapy attacks the cancer cells in your body. But treatment may also affect normal cells. The cells in your blood, digestive system, and hair follicles are most at risk. Damage to these cells causes side effects. You can manage side effects to stay more comfortable during treatment.

## Reducing Risk of Infection

Chemotherapy reduces the number of white blood cells in your blood. When you have fewer white blood cells, you are less able to fight infection. To prevent infection:

- Wash your hands often.
- Stay away from people who have infections you might catch, such as colds or the flu.
- Talk with your doctor about medications that can raise your white blood cell count.



## Treating Anemia

Chemotherapy also reduces the number of red blood cells in your blood. Having too few red blood cells is called **anemia**. Symptoms include weakness, fatigue, and shortness of breath. If you have any of these, call your doctor. You may need medication to help build up your red blood cell count.

## Preventing Bleeding

During chemotherapy, your body makes fewer **platelets**. These are structures that help your blood clot. When your body makes fewer platelets, you may have increased bleeding. To reduce this risk:

- Be very careful with sharp objects, such as knives and razor blades.
- Avoid activities that may cause bruising.
- Talk to your doctor about medications that can raise your platelet count.

## When to Call Your Doctor

Call your doctor or nurse right away if you have:

- Any sign of infection, including temperature of 101°F (38.3°C) or higher, sweating, chills, coughing, or throat pain
- Chest pain or trouble breathing
- Bleeding that won't stop
- Vomiting or diarrhea

## Controlling Nausea

You may have an upset stomach during therapy. To ease nausea:

- Have someone else cook for you.
- Take anti-nausea medications as directed.
- Eat slowly.
- Have small meals throughout the day.
- Eat foods at room temperature.

## Reducing Diarrhea and Constipation

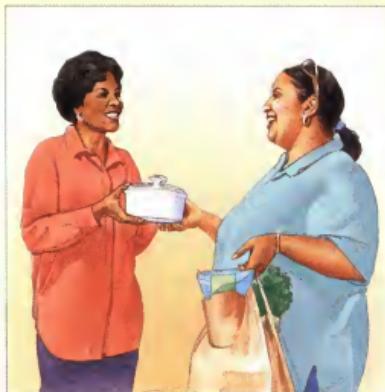
Chemotherapy may affect your intestines.

- If you have diarrhea (loose stools), drink more fluids. Also try eating bland foods such as bananas, rice, and toast.
- To avoid constipation (difficulty passing stool), eat high-fiber foods such as bran, fruit, vegetables, and whole-wheat bread.
- Ask your healthcare provider or pharmacist about prescription and over-the-counter medications that may help.

## Adapting to Hair Changes

Hair loss is a common side effect of chemotherapy. You may lose hair on different parts of your body. But the hair will grow back after treatment is over. In the meantime, to make hair loss less upsetting:

- Get a short haircut to make hair loss seem less sudden. Have someone shave the remaining patches if your hair loss has been uneven.
- Have a wig made before hair loss occurs.
- Wear a favorite hat or scarf. This can protect your scalp and make hair loss less obvious.
- Fill in missing patches of eyebrow with a makeup pencil.



Friends and family may offer help with preparing meals. This is one way to avoid nausea from cooking smells.





# Hormone Therapy

Hormone therapy attacks the cancer cells in your body. It works by keeping cancer cells from getting the hormones they need to grow. Hormone therapy is also used to keep cancer from coming back.

## How Hormone Therapy Works

Hormone therapy attacks cancer cells throughout the body (**systemic therapy**). It is used with patients whose cancer cells respond to estrogen or progesterone. The hormones bind to special sites on the breast cancer cells (receptors), causing them to grow. But during treatment, medications such as tamoxifen bind to these sites instead. This inhibits the cancer cells and keeps them from dividing. Other medications—**anastrozole**, for instance—reduce the body's production of estrogens. With less estrogen to bind with, cancer cells are less likely to grow.

## During Treatment

Your doctor will give you a prescription for hormone therapy. You will need to take pills daily for up to 5 years or more. During this time, your doctor will want to monitor your progress. You will be told how often to schedule office visits.

## Your Body's Response

Hormone therapy can strengthen bones. At the same time, these medications can cause weight gain, bloating, and hot flashes. Use of tamoxifen is also linked with **endometrial** (uterine) cancer, blood clots, and eye disease. These problems are rare. But to screen for them, you may need to have eye and pelvic exams more often.



Cancer cells that are receptive to estrogen may also respond to hormone therapy.

## Looking Ahead

If you want to help in the development of new breast cancer medications, talk to your healthcare provider. You may be eligible for a **clinical trial**. This is a way of testing new medications. By taking part in a clinical trial, you can receive treatment while also helping other women with breast cancer.



## Follow-up Care

Successful treatment is the first step toward a healthy future. Now you can begin a follow-up program. This lifelong program should include visits to your healthcare provider, mammograms, and breast self-exams. Maintaining each part of this program will help give you peace of mind as you begin your life after treatment.

### Visit Your Doctor

Even after treatment, your doctor will want to watch your health closely. See your doctor as directed. You may be asked to come in twice a year or more. Other members of your healthcare team will also want to see you. At these visits, report any changes in your breasts or problems with your general health.

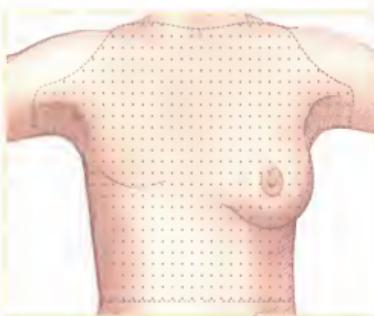
### Schedule Mammograms

Your doctor will tell you how often to have mammograms. During your appointment, extra x-rays may be taken. There is no need for concern. This is common after treatment for breast cancer.

### Perform Breast Self-Exams

Be sure to do monthly breast self-exams. If you've had breast surgery or treatment, your breasts probably look and feel different. Ask your doctor how to do the exams and what to look for. Remember to check:

- Both the left and right side of the chest.
- The skin over the chest wall (if you've had a mastectomy).
- Any incisions or scars.
- Above and below the collarbone.
- The armpits.
- The entire chest wall, down to the bottom of the ribs.



Feel for changes in the shaded area shown above.



# Breast Health for Life

You are not facing breast cancer alone. Your healthcare team, friends, and family can all give you help and support. Ask your healthcare provider about local groups for women with breast cancer. For more information, contact the sources listed below.

## American Cancer Society

800-227-2345

[www.cancer.org](http://www.cancer.org)

## National Cancer Institute

### Cancer Information Service

800-422-6237

[www.nci.nih.gov](http://www.nci.nih.gov)

## National Lymphedema Network

800-541-3259

[www.lymphnet.org](http://www.lymphnet.org)



### Consultant:

Nima A. Grissom, MD, FACS, General Surgery

### With contributions by:

Ari D. Baron, MD, Oncology

Thomas J. Gibson, MD, FACS, General Surgery

Ruth E. Hoddinott, MD, Family Practice

Gabriel M. Kind, MD, Plastic Surgery

Claudia Diane Pratt, RN, BSN, MA, Breast Health

Mark C. Rounsvville, MD, Radiation Oncology

Fred B. Tomlinson, MD, FACS, Plastic Surgery

Also available  
in Spanish

 **Krames**  
To order, call: 800-333-3032  
A MediMedia USA Company